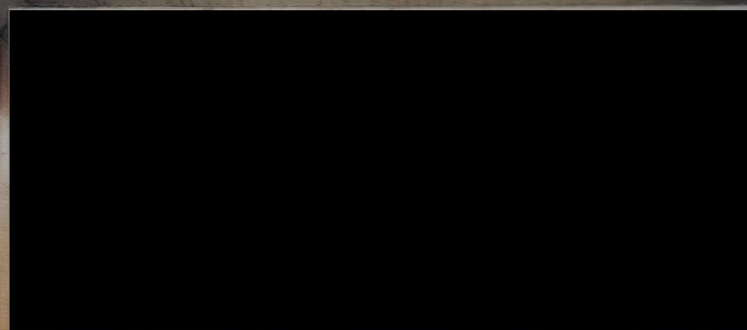


VISIT...

LANZAROTE
Caliente.COM

LOUIS I. KAHN

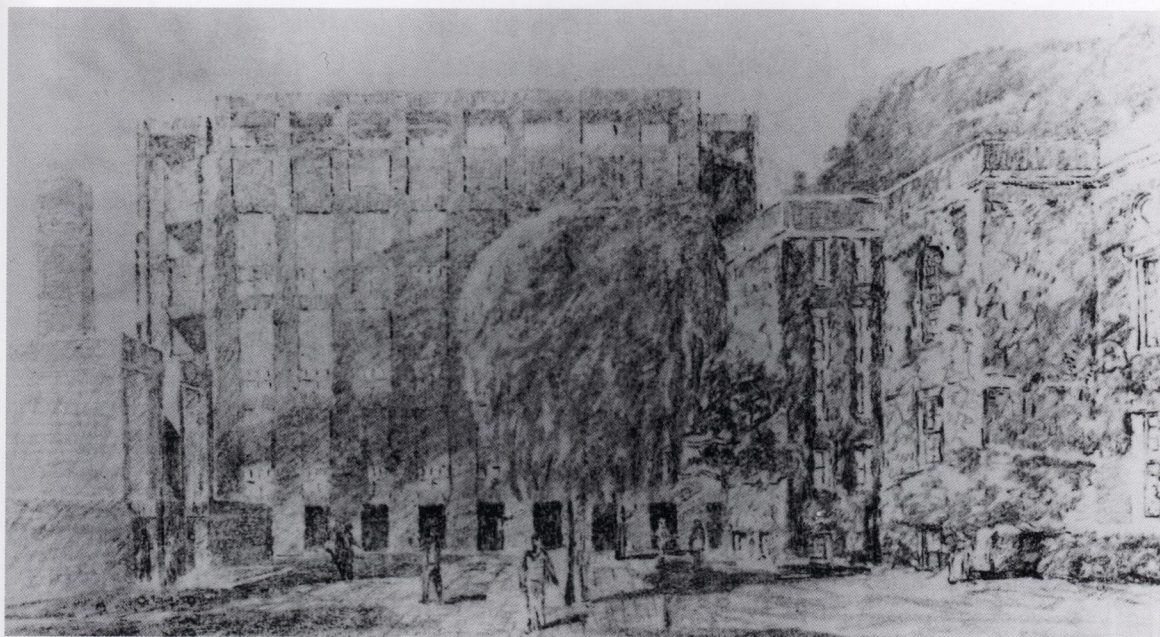
The Library at Phillips Exeter Academy



Glenn E. Wiggins

LOUIS I. KAHN

The Library at Phillips Exeter Academy





LOUIS I. KAHN

The Library at Phillips Exeter Academy

by Glenn E. Wiggins



Van Nostrand Reinhold

ITP® A Division of International Thomson Publishing Inc.

New York • Albany • Bonn • Boston • Detroit • London • Madrid • Melbourne
Mexico City • Paris • San Francisco • Singapore • Tokyo • Toronto

Cover design:
Mike Suh

Copyright © 1997 by Van Nostrand Reinhold

ITP® an International Thomson Publishing Company
The ITP logo is a registered trademark used herein under license

Van Nostrand Reinhold staff:

Executive Editor:
Roberto de Alba

Production Editor:
Carla M. Nessler

Production Manager:
Mary McCartney

Text Design & Composition:
Paul Aljian

Electronic Projects Manager:
Geraldine Albert

Printed in Hong Kong

For more information, contact:

Van Nostrand Reinhold
115 Fifth Avenue
New York, NY 10003

Chapman & Hall GmbH
Pappelallee 3
69469 Weinheim
Germany

Chapman & Hall
2-6 Boundary Row
London
SE1 8HN
United Kingdom

International Thomson Publishing Asia
221 Henderson Road #05-10
Henderson Building
Singapore 0315

Thomas Nelson Australia
102 Dodds Street
South Melbourne, 3205
Victoria, Australia

International Thomson Publishing Japan
Hirakawacho Kyowa Building, 3F
2-2-1 Hirakawacho
Chiyoda-ku, 102 Tokyo
Japan

Nelson Canada
1120 Birchmount Road
Scarborough, Ontario
Canada M1K 5G4

International Thomson Editores
Seneca 53
Col. Polanco
11560 Mexico D.F. Mexico

All rights reserved. No part of this work covered by the copyright hereon may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems—without the written permission of the publisher.

1 2 3 4 5 6 7 8 9 10 CP-HK 02 01 00 99 98 97

Library of Congress Cataloging-in-Publication Data

Wiggins, Glenn E.

Louis I. Kahn : the library at Phillips Exeter Academy / Glenn E. Wiggins.

p. cm.

Includes bibliographical references

ISBN 0-442-02531-9

1. Phillips Exeter Academy. Library — Buildings. 2. Academic libraries — New Hampshire — Exeter. 3. Library architecture — New Hampshire — Exeter. 4. Exeter (N.H.) — Buildings, structures, etc. 5. Kahn, Louis I., 1901-1974 — Criticism and interpretation.

I. Title

Z733.P57W4 1997

727'.82'09742—dc21

97-6038

CIP

www.vnr.com

product discounts • free email newsletters

software demos • online resources

email: info@vnr.com

A service of **ITP®**

Notice of Liability

The information in this manual and on the included CD-ROM is distributed on an "As Is" basis, without warranty. While every precaution has been taken in the preparation of the manual and CD-ROM, neither the author nor Van Nostrand Reinhold shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this manual or CD-ROM or by the computer software and hardware products described or contained in them.

Contents

Foreword and Credits 7

A Brief Overview of the Library at Phillips Exeter Academy 11

How to Use the CD-ROM 37

Navigation Information 40

System Requirements for CD-ROM and Installation Instructions 46

Bibliography and Suggested Reading 48



Foreword and Credits

Many people believe that architecture is the essentially deterministic conjunction of program, legalistic issues, and technique. Users of this CD-ROM may come to question such a belief. A thoughtful exploration of the experiential and analytical sections of the CD will reveal Louis Kahn to have had a strong ideological and aesthetic commitment to a particular way of designing. In the Library at Phillips Exeter Academy we see a design that responds to far more than basic utilitarian concerns, regulations dealing with planning, zoning, and building codes, and methods and materials of construction. While all of these are important, what stands out is the way in which Kahn's particular commitment to design informs these and other issues.

There are many risks in using CD-ROM for this study. Foremost among them is the danger of emphasizing form over content. While good form is important, it is in no way a substitute for content. Therefore, it is important to note that this CD is first and foremost a study of Kahn's particular design ideas as they are embodied in the Library. In studying Kahn we may discover ideas that help us to understand not only Kahn and his work but also our own work.

Why CD-ROM instead of Text?

I enjoy architecture and find it infinitely interesting. I enjoy studying architects, their design ideas, and, whenever possible, visiting their actual buildings. Like most people, however, it is impossible for me to visit every building I would like to see and study. In these instances it is natural to resort to books and articles, studying text, photographs, and drawings. This process has many strengths, not the least of which is the portability of the material, but it also has limitations.

Variety of Images

- Generally not enough images are available to provide a complete description of the building.
- Images may be taken not to explain a building but rather to make it look good.
- Images are not arranged to provide a feeling for what it might be like to actually visit the building.
- Often the position from which an image was taken is unclear.
- Images typically focus solely on the building under consideration. Thus the building is treated in isolation, without regard for the environment surrounding it.

Availability of Formats

- The traditional text and photographic format precludes the video, sound files, and animation sequences that provide richer description of the building, its architect, and the design ideas.

Clarity of Relationships

- I often find myself struggling to relate a piece of text to a photograph and the photograph to a plan.

To avoid problems such as these, I selected CD-ROM over traditional print for this study. The format provides a fresh and appropriate way to study architecture, approximating as nearly as possible the actual experience of visiting the building. Advantages include:

Variety of Images

- Images are arranged *experientially*, their sequence following what visitors to the site might encounter as they walk around and through the building.
- A large number of images have been included to provide the fullest possible visual description.
- The position from which each image was taken is clearly indicated.
- Both the architecture and the landscaping around the building are completely shown. The thoughtful architectural study does not treat the building as a jewel box, without regard for its surrounding environment.

Range of Media

- To provide the richest possible visible description of the Library, still images are complemented by a large number of video clips. These provide information about the building that no number of still photographs can provide.
- Sound files are included to enrich the study process. Notable among these are excerpts of Kahn speaking about his design process and the Library. Also of note is the clock sound heard every time the CD is started. This sound was recorded from a large grandfather clock that sits adjacent to the Library's main entrance and central hall. It is a subtle but distinctive feature of the Library.
- Animation files have been included to more fully describe Kahn's design ideas for the building. They facilitate a quick understanding of often difficult and complex issues.
- Because the CD employs so many media, there is no one right way to use it; rather, users can move through the material in any manner they choose. However, users who elect to go through the program one frame at a time will see that the images have been arranged experientially, approximating what it might be like to approach and pass through the Library.

In addition to the features already discussed, the CD includes an extensive Analysis section that helps users explore Kahn's particular commitment to design and the way it influenced the built form.

A Note about Photography

It has been suggested, perhaps cynically, that a mediocre design can be enhanced by good, if deceptive photography. Certainly architects, owners, and photographers work to capture images of a building that project a particular, desired quality. The danger is that the images may become such art objects that the building itself is misrepresented, if not lost.

No deception is necessary when photographing the Library — the quality of the architecture speaks for itself. My goal is to provide photographs that fully reveal the nature of the building as well as provide insights into its design. Parenthetically, it is worth mentioning that I have included photographs of the building exterior taken under a variety of natural lighting conditions. I find that the character of the exterior varies according to the quality of the sunlight striking it. For example, on a clear, dry summer evening the building's elevations have a rich orange glow. In contrast, on hazy, humid mornings they seem much

cooler, almost bluish. While using the CD you will notice this range of lighting conditions and how it adds another level of complexity to the design. Figures 1, 2, 10, 20, 22, 28, and 32 courtesy of Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historic and Museum Commission. Figures 3, 26, 27, 29, 30, 31, 33, 34, 35, 36 courtesy of Grant Mudford Photographer.

Thanks

There are many people to thank for their kind assistance during the development of this CD. Foremost are the librarians and staff of the Library at Phillips Exeter Academy. I am grateful for their openness and cooperation during my many visits to the Library. Thanks to the Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission, and again to the Library at Phillips Exeter Academy for the use of the sound recording of Kahn. Jacquelyn Thomas of Phillips Exeter was particularly helpful with the recording.

Many thanks to Mark Gunderson for his photographs of the Kimbell Museum and Professor Stephen Diamond for his photographs of the Salk Institute. Thanks also to the Yale University Art Gallery and the Yale Center for British Art for allowing me to photograph the interiors of their buildings. Black-and-white photographs of Louis Kahn are all from the Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission. Thanks to Vicky MacDonald of Shambhala Publications, Inc., for her assistance with my research.

Professor Mike Feller, who has been an unending source of advice and assistance throughout this project, deserves special praise. The final result would certainly be less without his input, and I am most grateful. Thanks also to the Davis Center for Advanced Computer Graphics and Interactive Learning and to the Wentworth Institute of Technology for the use of hardware and software laboratories.

I am also indebted to Roberto de Alba and Van Nostrand Reinhold. Roberto has been a great source of encouragement, helping me maintain my enthusiasm throughout the project.

Thanks to Donald Schön and Leo Marx at MIT, who, while not involved with this particular project, are a continuing source of inspiration.

Finally, thanks to Rae Jean Wiggins, who contributed her usual thoughtful comments on the printed part of the project, as well as valuable advice concerning issues of media.

—Glenn E. Wiggins
Boston, 1997

A Brief Overview of the Library at Phillips Exeter Academy

When he began his design for the Library at Phillips Exeter Academy, Louis Kahn first asked himself what a library should be. His goal, at least in part, was to discover the essential meaning of "library" and to let this meaning guide his design process. Unlike an architect who might begin with studies of the building's more practical requirements — its program — or who might visit and study exemplary libraries for input and inspiration, Kahn began as if no other library had ever been built, as if *this* problem were completely new. He wanted to know how this institution "library" related to men and women.

Kahn answered his question by saying, "I see a library as a place where the librarian can lay out the books, open especially to selected pages to seduce the readers. There should be a place with great tables on which the librarian can put the books, and the readers should be able to take the books and go to the light."¹ In many ways this seemingly simple statement describes the Library's entire design. It also indicates a design in which a user's movement — his or her procession through and around the building — is of particular significance. Given the importance of procession to the overall design of the Library, an overview of the building is best accomplished by tracing the steps a user might take moving to and through the building.



FIGURE 4. *Looking Northeast to Library.*

When approaching the Library from a distance (Reference Figure 4), a user may notice that it is one of several adjacent traditional masonry structures. Certainly Kahn was influenced by the existing buildings on the campus. He said, "Brick was the most friendly material in this environment. I didn't want the library to be shockingly different in any way. I never lost my love of the old buildings."² The Academy Building (Reference Figure 5), which is directly north of the library, is typical of the surrounding masonry structures.

From a distance, a user may be tempted to conclude that all of the Library's elevations are the same. Closer inspection, however, reveals a great deal of subtle variation

both between different elevations and within individual elevations. For example, consider the wide variety of window types occurring on the east elevation (Reference Figure 6). These windows were designed in response to the specific qualities of the light they admit into the building as well as to the differing needs in the interior behind them.

Passing near the façade a user also notes a variation in the width of the masonry piers between the windows (Reference Figure 7). Kahn felt that it was important to be “true” to the nature of a material. For example, brick should be treated as a load-bearing material, not as a mere veneer on a skeletal structure. He argued further that the force of gravity and the weight of the masonry should be evident in the construction. Thus, as the Library’s brick piers rise and the load they must carry decreases, they

FIGURE 5. *Academy Building—South Elevation.*





FIGURE 6. *East Elevation.*



FIGURE 7. *Looking up Pier.*

become progressively narrower. Similarly, arches above windows become shallower and windows wider.

Surrounding the Library on all sides is an arcade (Reference Figure 8). It has been commented upon by numerous sources that the design of this arcade tends to conceal the main entrance into the building. Kahn, however, felt this continuous arcade to be an essential feature for the institution. He said, "From all sides [of the campus] there is an entrance. If you are scurrying in a rain to get to the building, you can come in at any



FIGURE 8. *Typical Arcade.*



FIGURE 9. *Entrance at North.*

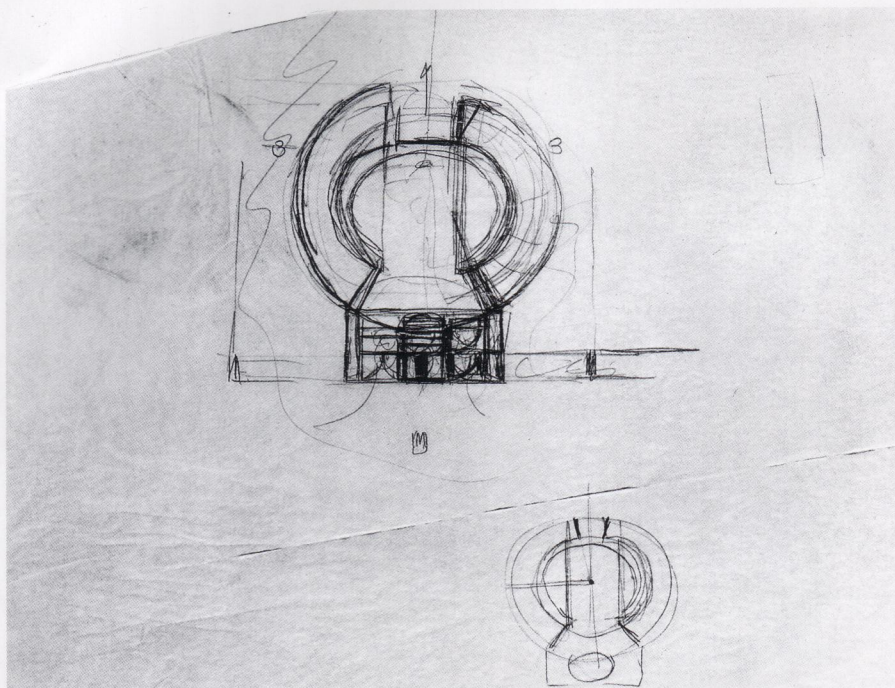


FIGURE 10. Schematic Sketch. Entrance stairs plan. Graphite on yellow trace.

point and find your entrance. It's a continuous campus-style entrance."¹³ In addition to providing shelter, the arcade does inevitably lead users to the main entrance, which is located on the north elevation (Reference Figure 9). Moreover, the arcade provides a sense of transition from the building's exterior to its interior:

It is upon entering the building that users can begin to understand the way in which Kahn's form statement concerning what a library "wants to be" so fundamentally shaped the building's design. Passing from exterior to interior users encounter a grand circular stair (Reference Figure 11). Moving up this stair they enter a central hall surrounded on all sides by large circular openings; this is where the "invitation to books" occurs. This invitation occurs in several different ways. First, the librarians actually place selected books on tables and in cases. Also, carts filled with books — a function of the normal life of the Library — are evident (Reference Figure 12). At a more essential level, however, the design of the building itself participates in the seduction of the user. Moving up the stair and standing in the hall, users can look through the large circular openings and into the main book stacks of the library (Reference Figure 13). This provides an invitation to leave the central hall and enter the stacks.

FIGURE 11. Entry Stair.





FIGURE 12. *Circulation Desk in Central Hall.*

FIGURE 13. *Looking up Stair into Central Hall.*





FIGURE 14. *Looking across Shelf into Central Hall.*

FIGURE 15. *Typical View into Book Stacks.*



Seduced by the books and moving to the upper levels, users maintain contact with the central hall by means of continuous balconies along which a shelf designed for the placement of books runs (Reference Figure 14). In addition to providing users with a convenient reference and resting place for the books they are considering, this shelf gives the librarian another location in which to place books to entice the reader. Turning from the balcony, users enter the book stacks to select their books (Reference Figure 15).

After choosing a book, the user moves to the study carrels located along the perimeter of the building (Reference Figures 16 and 17). This movement completes Kahn's statement that the reader should be able to take the books to the light, as the study carrels are bathed in natural light. As opposed to the quiet, cool light of the central hall, or the utilitarian light of the book stacks, the light at the carrels is warm and inviting, enhanced by the warm tones of the wood, carpet, and masonry.



FIGURE 16. Study Carrel.

FIGURE 17. Typical Study Carrels.



On the Library's fourth floor is a series of seminar and meeting rooms (Reference Figure 18) as well as books to which access is restricted. From these rooms users can exit to an exterior roof terrace that is continuous on all sides of the building (Reference Figure 19) and provides another way for the user to take the books to the light.

From the terrace users can look down onto the surrounding campus. From below, the roof terrace is visible as a series of open screens and masonry slots along the building's uppermost floor (Reference Figure 21). From a processional, movement-oriented perspective, the trip to and through the Library comes full circle.



FIGURE 18. *Fourth Floor Reading Room.*



FIGURE 19. *Typical Terrace View.*

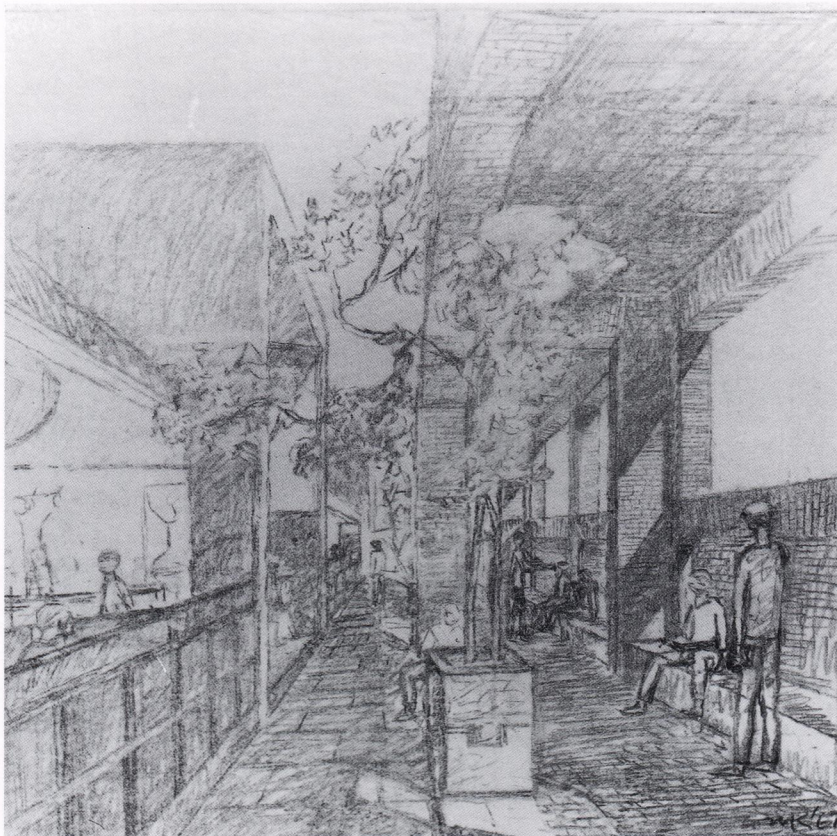


FIGURE 20. Exterior Perspective. Roof terrace. Graphite and negro lead on yellow trace.

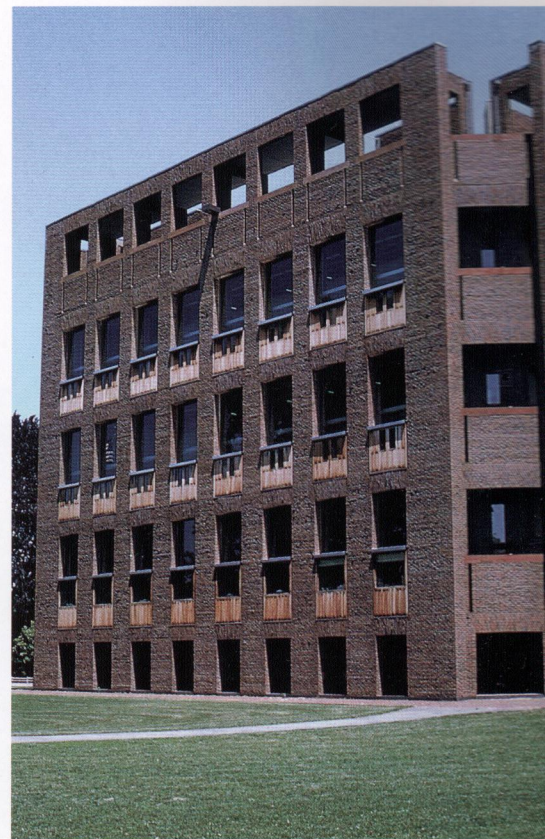


FIGURE 21. West Elevation.

¹ Brownlee, David B. and David G. De Long. *Louis I. Kahn: In the Realm of Architecture*. New York: Rizzoli, 1991: 390.

² Jordy, William H. "The Span of Kahn," *Architectural Review* 155, no. 928 (June, 1974): 330-5.

³ Wurman, Richard Saul, ed. *What Will Be Has Always Been: The Words of Louis I. Kahn*. New York: Access Press and Rizzoli International Publications, Inc., 1986: 178.

DETAILS



FIGURE 23. *Top Corner Detail.*



FIGURE 24. *Exterior Wall.*



FIGURE 25. Window Detail—North Elevation.



FIGURE 26. *Entrance Stairs.*



FIGURE 27. *Travertine Bench above Entrance.*

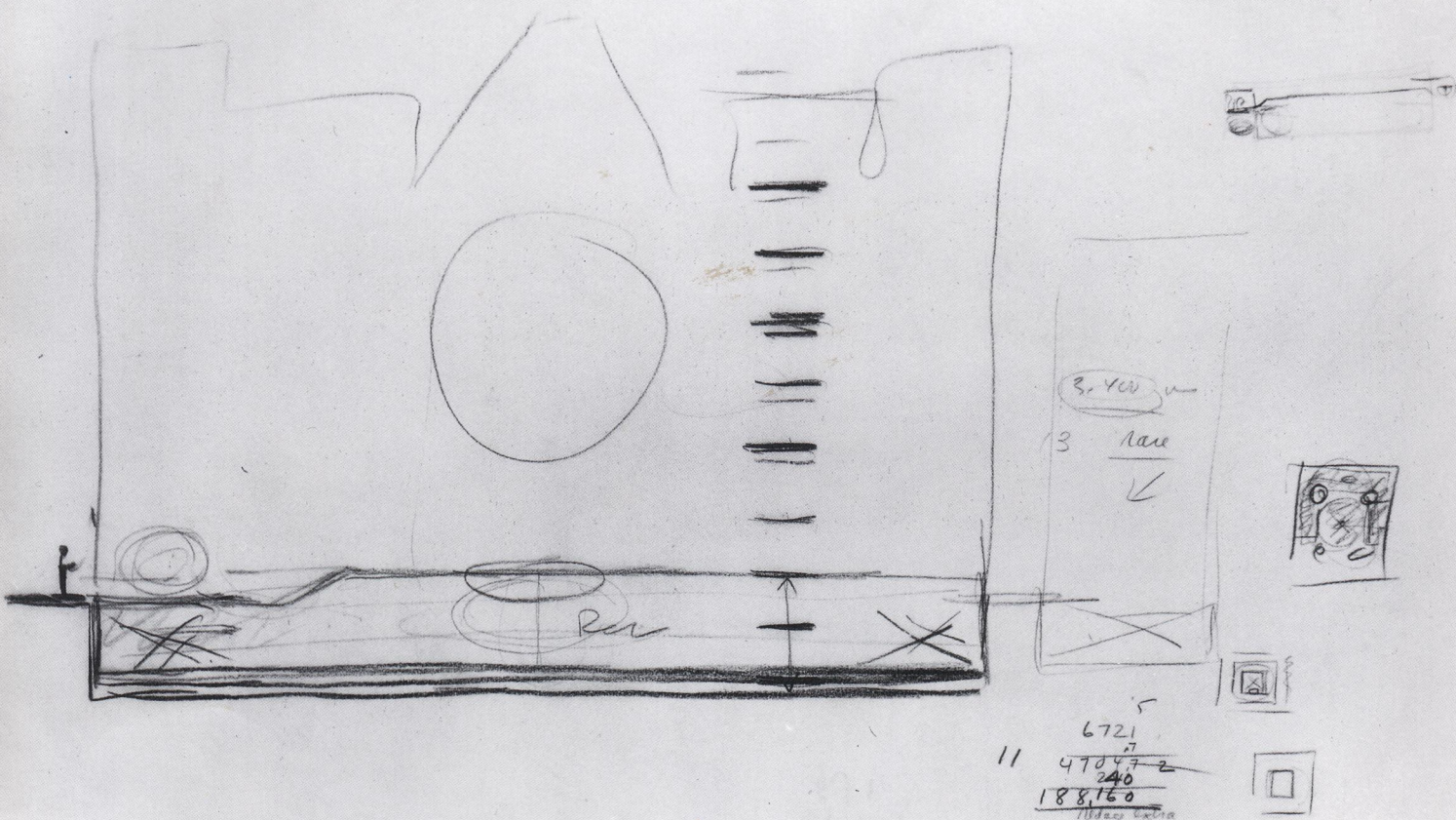
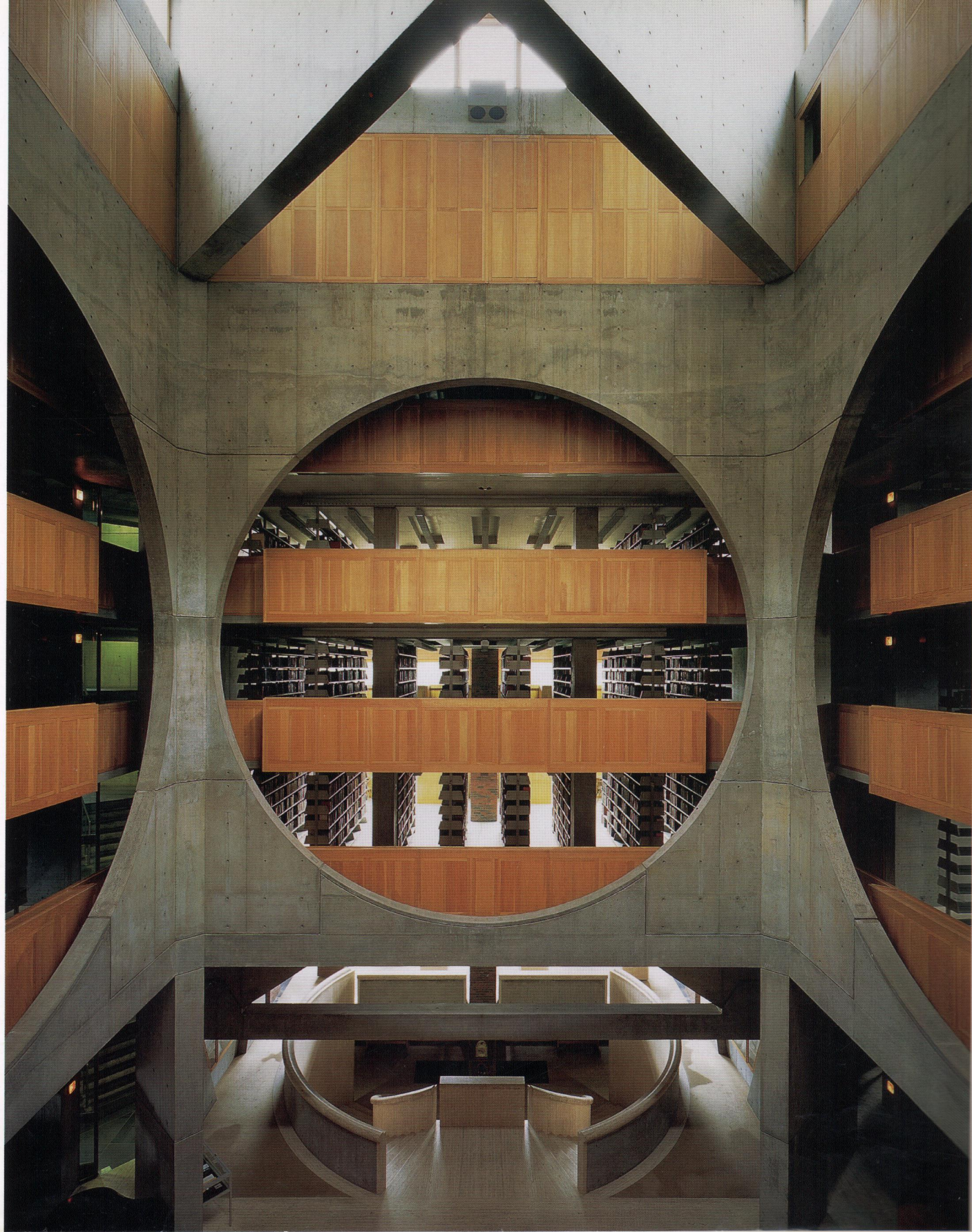


FIGURE 28. Schematic Sketch. Various partial plans and section. Graphite and negro lead on yellow trace.

FIGURE 29. Interior View of Central Hall.



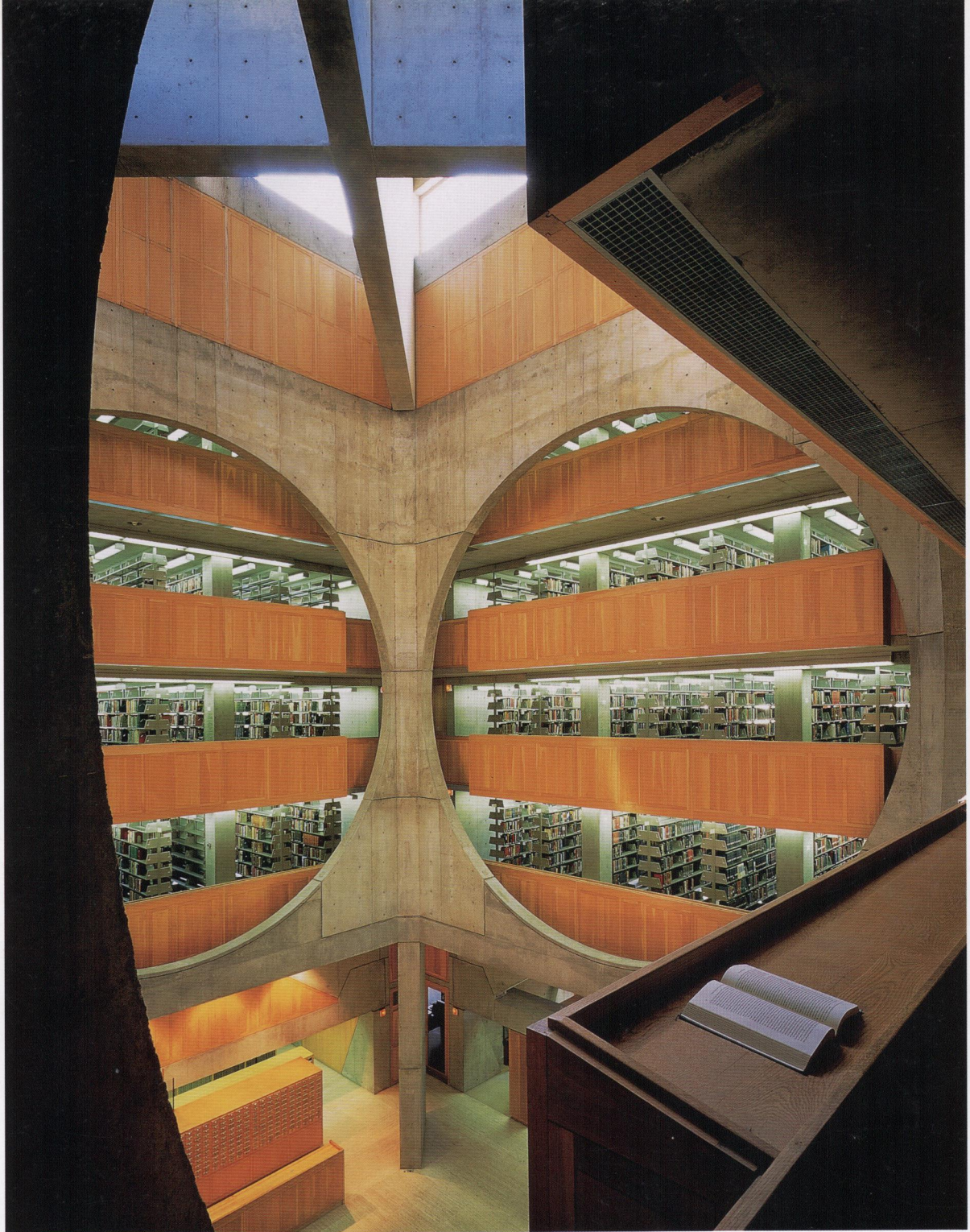


FIGURE 30. *Interior View of Central Hall.*



FIGURE 31. *Interior View of Central Hall looking at Card Catalog.*

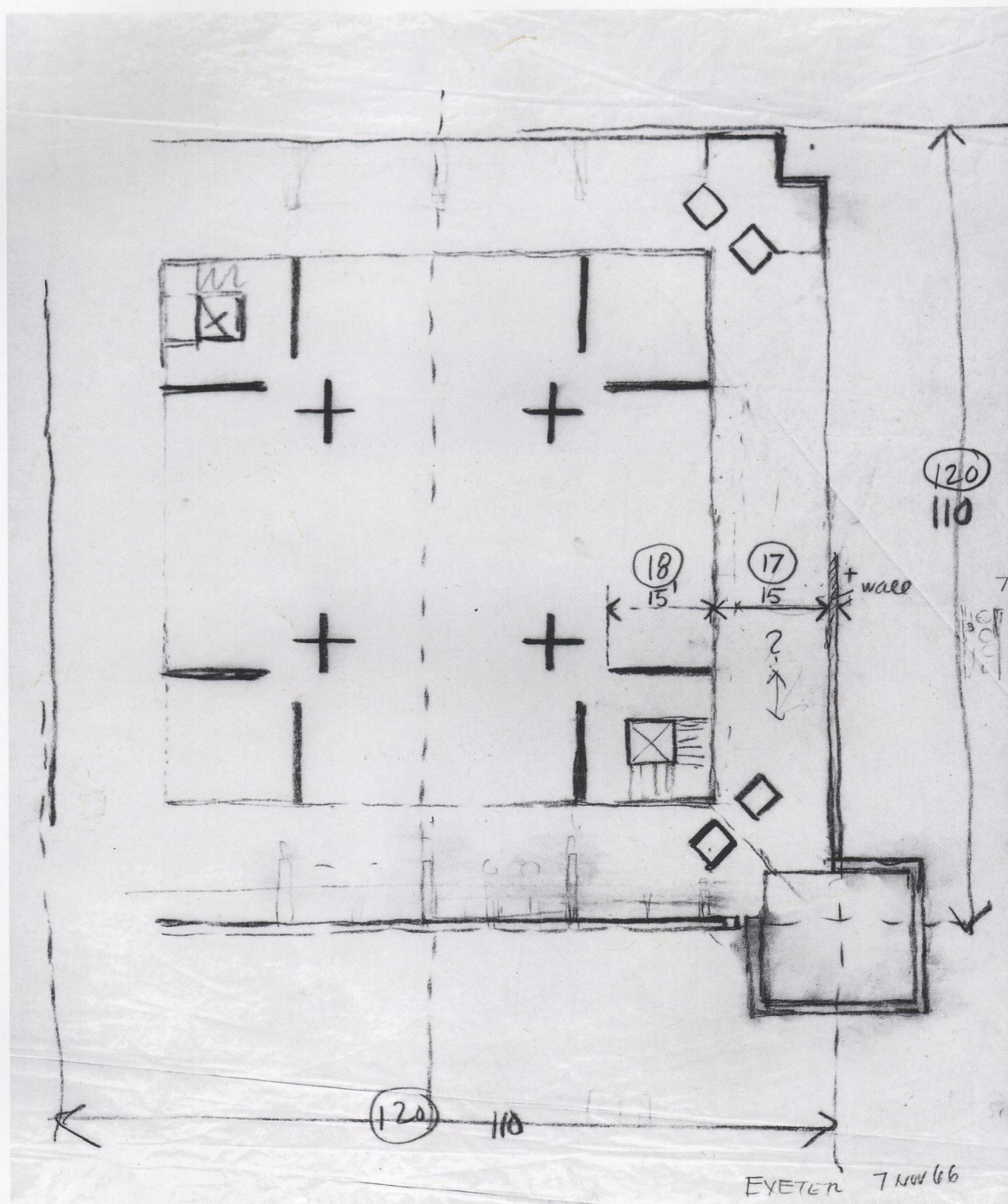


FIGURE 32. Schematic Sketch. Plan. Graphite, negro lead, orange pencil and charcoal on yellow trace.



FIGURE 33. *Interior View. Corner Detail.*



FIGURE 34. *Interior View. Office Space.*



FIGURE 36. (overleaf) Interior View of Central Hall looking up.



How to Use the CD-ROM

General Structure of Content

There is no substitute for actually visiting a building. The experience of an actual environment is necessarily much richer than any simulation of that environment. Within the limitations of simulation, however, this project provides the fullest possible description of the Library at Phillips Exeter Academy and the way in which Louis Kahn's commitment to design leads to the built form. Methods of presentation include photographs, video, sound, animation, drawings, and text.

As way of exploring the material, the CD is hierarchically broken into a number of subject groups (Reference Figure 37). While this hierarchy suggests a variety of routes a user might choose to follow in his or her exploration of the subject, part of the richness of the medium is the way in which it allows users to move through the material in a way relevant to their own inquiry.

At the opening level of the project, users will find the CD's most general information. Regardless of a user's experience, I suggest beginning with the *Overview*. This section provides a general tour of the Library and a good foundation for exploring other areas. Also at the opening level users will find a brief *Biography* of Kahn containing not only biographic information but also recordings of Kahn discussing his ideas about design and the Library. While this CD primarily makes reference to the Library, *Other Projects* provides a brief review of five additional designs by Kahn. *Help/Credits* is also available at

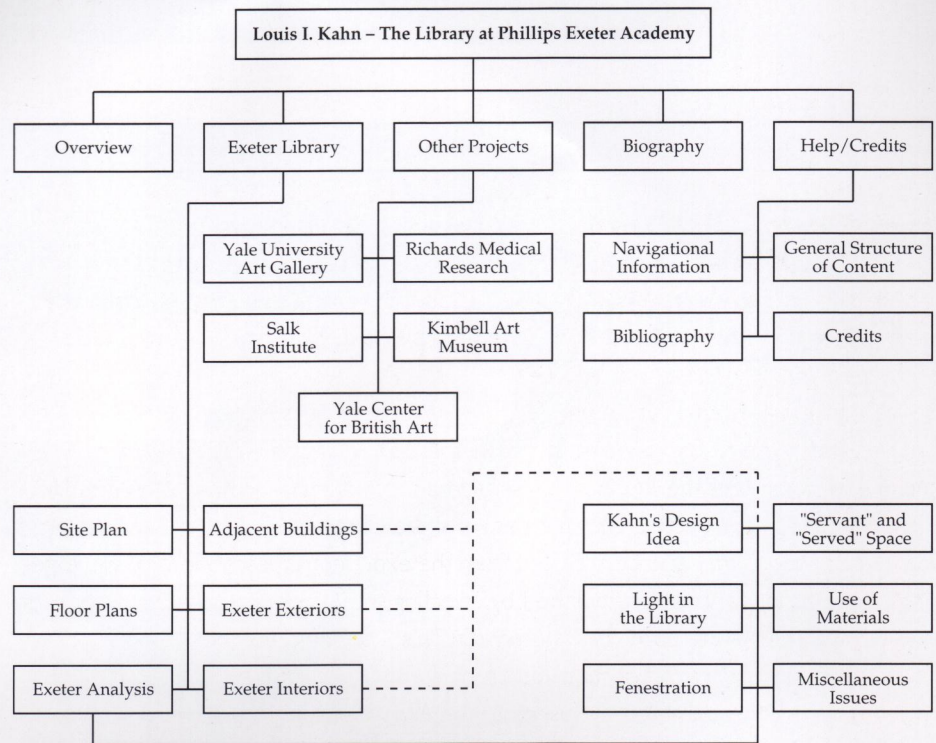


FIGURE 37. Flow Chart.

the opening level. The core of the CD is entered through *Exeter Library*. Selecting this option provides the next level of topics for consideration.

The sections *Exeter Exteriors* and *Adjacent Buildings* provide a complete visual description of the Library in its existing context. Seeing a building's context is important for any study of architecture and is particularly important at Exeter, where Kahn was strongly influenced by the surrounding site. *Exeter Interiors* continues this visual study by entering the building at grade and eventually moving to its roof terrace. Images are arranged experientially, occurring in the order a viewer might see them should he or she visit the building.

The sections *Site Plan* and *Floor Plans* provide another way to interface with the information in the study. First, these sections contain drawings that allow an examination of the actual site and floor plans. Second, the plans feature arrows indicating all of the still and video clips in the CD. Selecting one of the arrows brings up the selected image

for closer examination. Working with plans in this manner allows users to explore particular aspects of the building and site without being forced to move through an entire series of images.

Exeter Analysis provides an extensive study of Kahn's particular commitment to design as embodied in the Library. This section may be used in a variety of ways. First, it may be studied as an independent section, separate from both the site and floor plans and the experiential, visual descriptions of the site and building. Used in this manner, a variety of topics are available. While the medium allows users to select any topic, I suggest beginning with *Kahn's Design Idea*, which provides the framework on which many other elements of the design depend. Other topics — "*Servant*" and "*Served*" Space, *Light in the Library*, *Use of Materials*, and *Fenestration* — explore specific aspects of Kahn's design thinking, at both a macro and micro level. *Miscellaneous Issues* covers topics too brief to merit their own sections, but nonetheless important to a complete understanding of Kahn and the Library. This section also contains a number of Kahn's own sketches done in conjunction with the design of the Library.

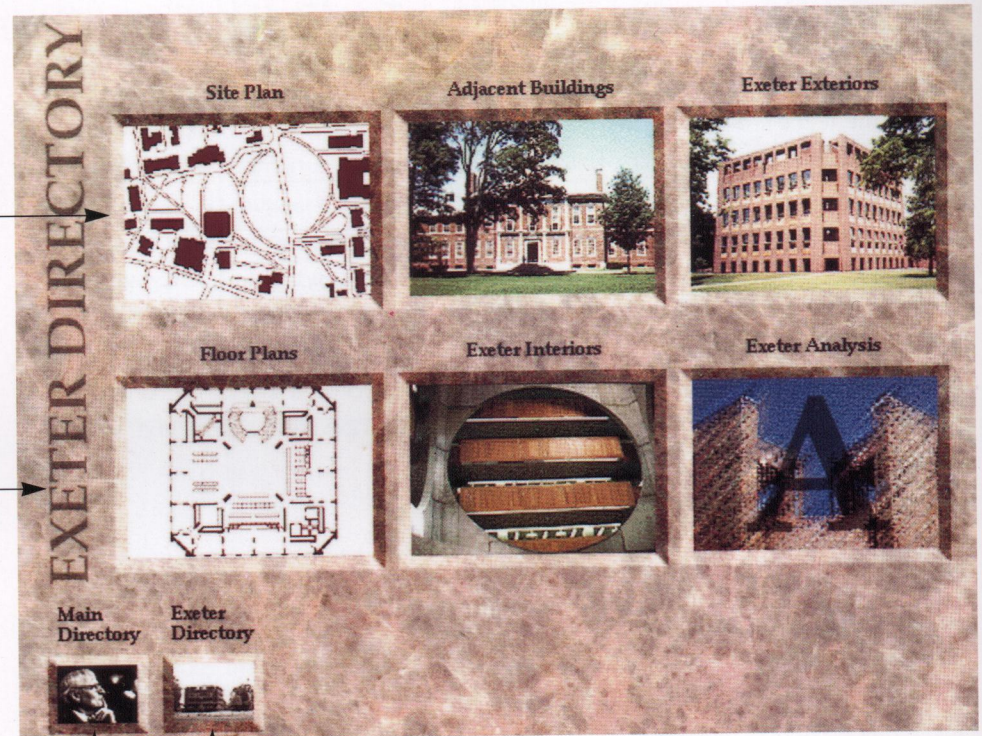
Exeter Analysis may also be accessed from the experiential descriptions of site, exteriors, and interiors. This is accomplished by selecting the A icon that frequently appears in the lower right-hand corner of the screen. This icon indicates the availability of an *Analysis* section, or part of a section, discussing some aspect of the image currently displayed. Selecting the icon takes the user into the *Analysis* section; a smaller version of the image is displayed there as a reminder, along with appropriate analytical text, video, and/or animation.

Navigation Information

This Is a Typical Directory Screen

Each of these six small pictures is an Icon for a particular topic. Clicking once on an Icon will take you to that topic.

The left-hand side of the window shows the title of the section you are currently in.



This is the Chain. The right most picture Icon shows where you are in the project. Icons to its left show the path you have taken into the project. Clicking on any Icon in the Chain will take you to the start of that topic.

This Is a Typical Image Screen



Brief text describing the contents of the window is located at the top of the screen.

This is the Browsing button. Clicking once on the right-hand arrow will take you forward one screen; clicking on the left-hand arrow will take you back.

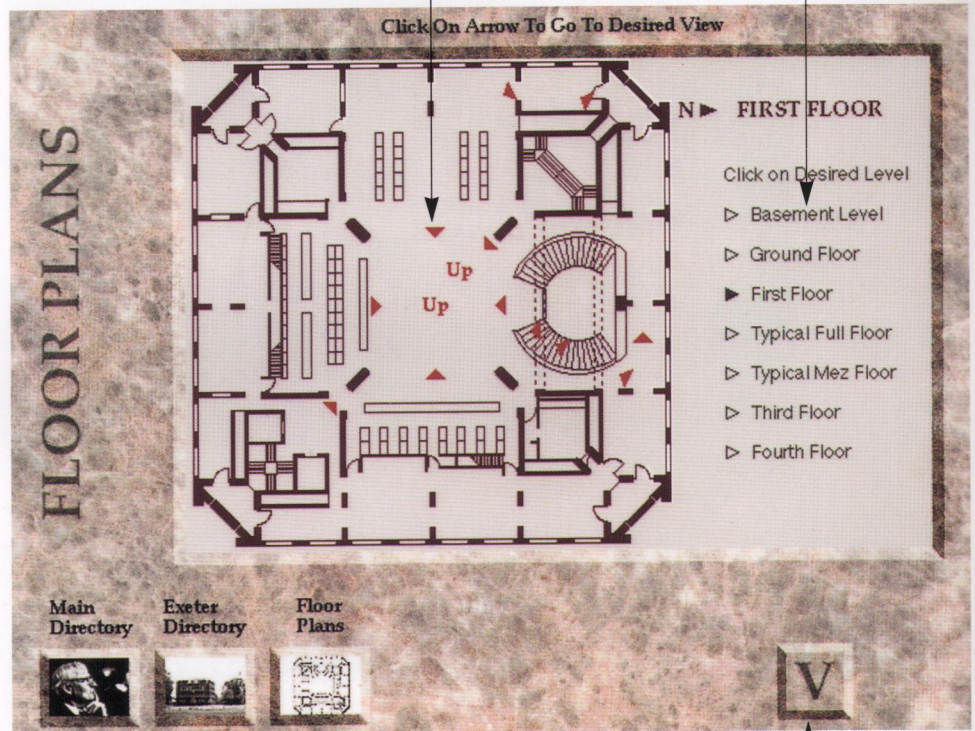
This is the Plan Selection Icon. A small arrow on the plan shows the position from which the current image was taken. Clicking once on this Icon will take you to a large-scale plan that references the current image as well as all other images in the project.

The A stands for Analysis. Clicking once on this Icon will take you to an Analysis Section where aspects of the building shown in the large image in the window are discussed.

This Is a Typical Plan Screen with Available Still Images Shown

These arrows (and the word Up) indicate still images contained in the project. Click once on any arrow to go to the desired view.

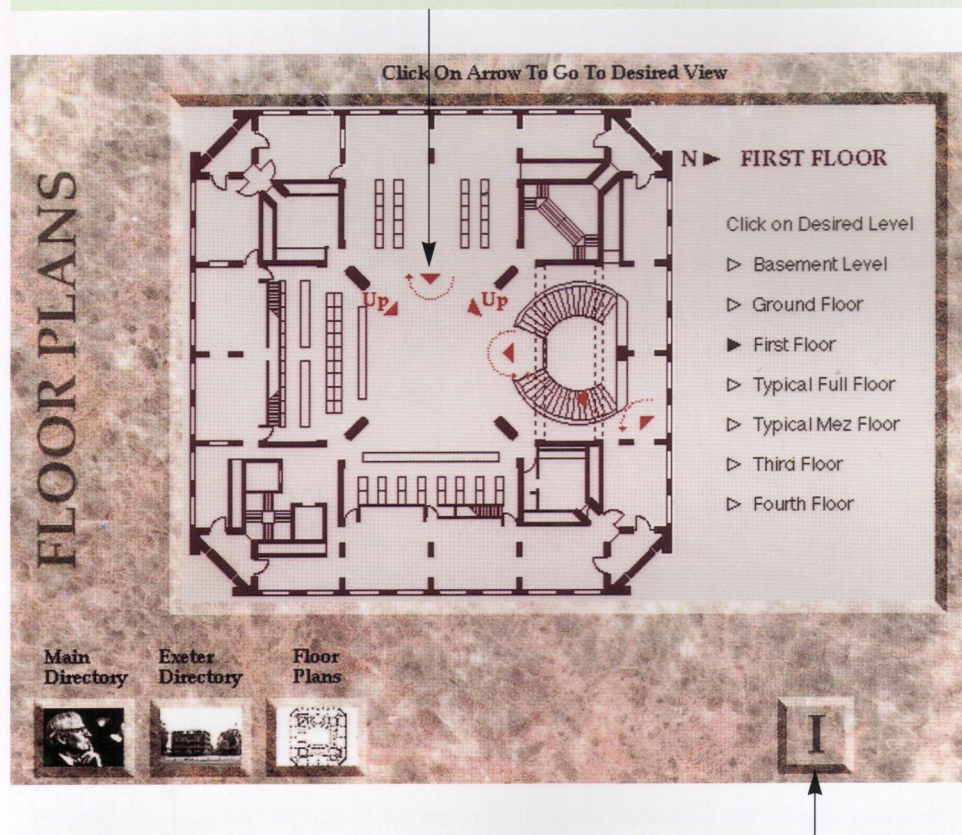
You can easily move among the different Floor Plan levels by clicking once on any of the titles.



The V indicates that video clips are available. Clicking once on this icon displays the possible choices.

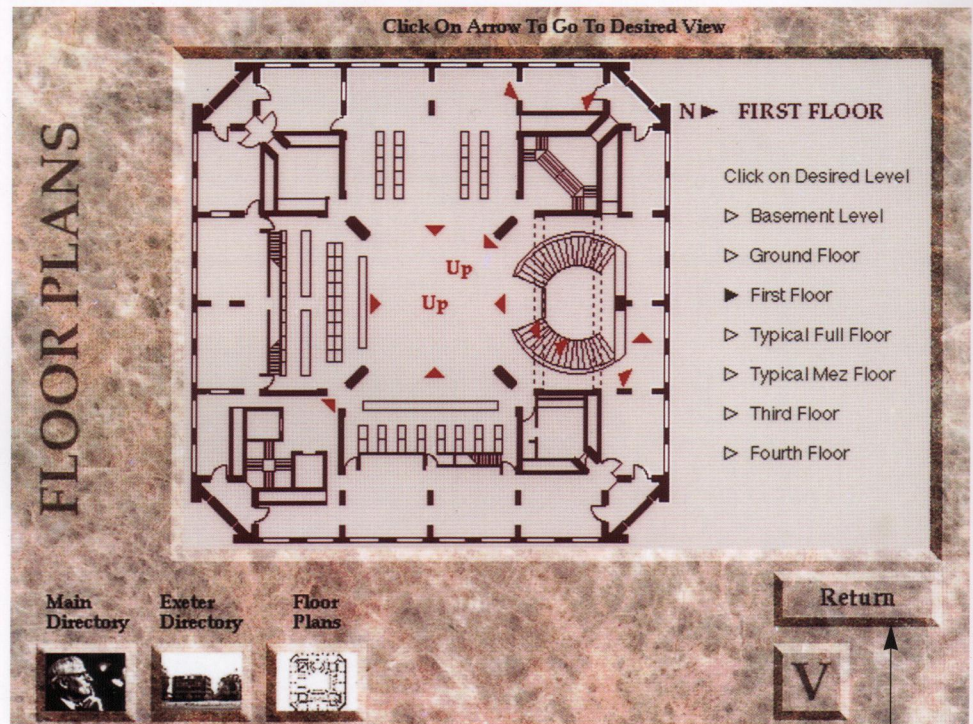
This Is a Typical Plan Screen with Available Video Clips Shown

These symbols (and the word Up) indicate available video clips. The arrow shows the direction of the shot, while the dotted arc shows the starting and ending points of the camera's sweep. Clicking once on any symbol plays the desired clip.



The I indicates that still images are available. Clicking once on this icon displays the possible choices.

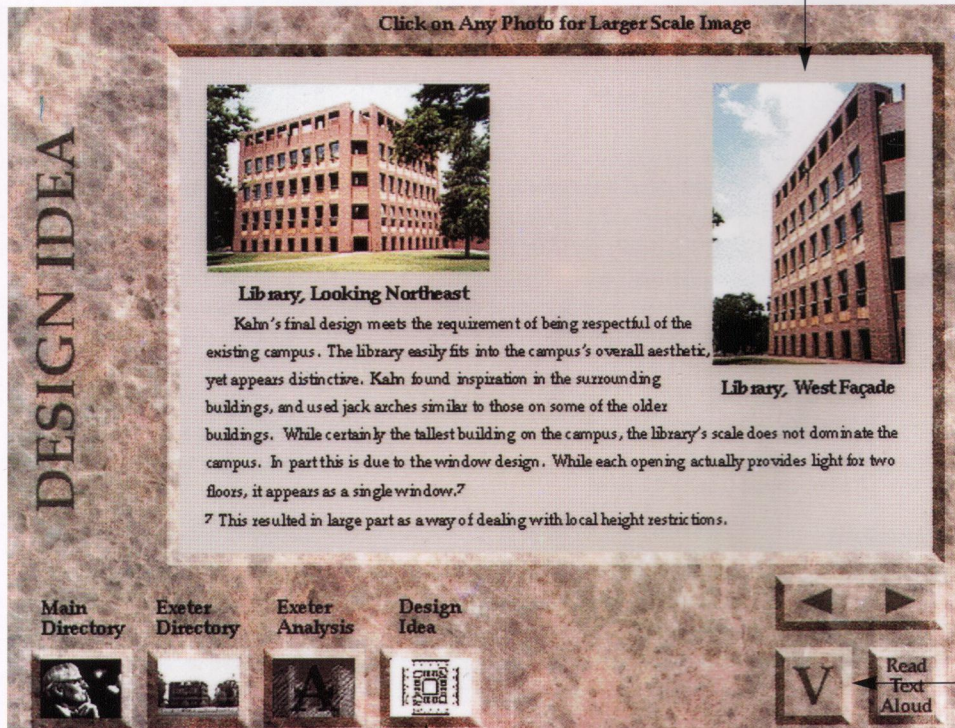
This Screen Shows the Use of the Return Button



As already noted, when browsing through the project's still images, you will see a Plan Selection Icon. Clicking once on that Icon brings you to large-scale plans such as the one shown here. In these instances a Return button will appear. Clicking once on this button returns you to the image from which you came.

This is a Typical Analysis Screen

Analysis sections of the project may contain text, still and video images, and animation. Clicking once on one of the small images will take you to a larger version of that image.



Analysis sections may be entered either as stand-alone modules or through the Image sections. When entering through an Image section (by clicking on the A icon in that section), you will go to the part of the analysis that deals with the image from which you came. *As a result, you will rarely be at the beginning of the section.* To move to the beginning of the particular Analysis section, click once on the right most Icon in the Chain.

System Requirements for CD-ROM and Installation Instructions

To run this CD-ROM you need a system that meets the following minimum requirements:

Macintosh Operating System

Configuration

- 68040 or PowerPC processor
- Apple System 7.0 or later
- 5 MB of free RAM (8MB of free RAM preferred)
- 8-bit color video display (16- or 24-bit color video display preferred)
- 14-inch color monitor
- Double-speed CD-ROM drive

Installation

- **Power Macintosh.** If you are using a Power Macintosh or equivalent, you may run either version of the program. The version titled *Exeter Library PPC* has been modified to take advantage of the PowerPC™ processor and uses 24-bit color for still images. However, due to file sizes associated with 24-bit color, this version will take longer to load than the Standard version. To launch this version, double-click on *Exeter Library PPC*.
- **Standard Macintosh.** If you are using a Macintosh with a 68040 processor, you should run the version of the program titled *Exeter Library 68K*. This version uses 8-bit color for still images. To launch this version, double-click on *Exeter Library 68K*.
- For both Power and Standard Macintosh, you should set your monitor color depth to match that of the version you are using (256 colors for *Exeter Library 68K*, thousands or millions of colors for *Exeter Library PPC*).

Installation of QuickTime:

This software requires QuickTime version 2.1.1 to run video segments. If you have QuickTime 2.1.1 or higher already installed on your computer you do not need to install QuickTime. But if you do not have version 2.1.1 or higher the regular installation will give you the option of running the installation for this utility. For unresolved technical problems, contact our technical support group at 800-325-3439 (for overseas calls use 914-747-2707). When this part of the installation is activated, follow the instructions for installation of QuickTime.

Windows Operating System

Configuration

- 80486 or Pentium-compatible processor
- Microsoft Windows 3.1 or later
- 4 MB of free RAM (8MB of free RAM preferred)
- 8-bit color video display (24-bit color video display preferred)
- 640 X 480 color monitor
- Double-speed CD-ROM drive
- MPC-compatible sound card
- Speakers
- Mouse or compatible pointer

Installation

This disc includes images in both 8-bit and 24-bit formats. Selecting **SETUPEXE** will install the 8-bit format with the 16-bit version of QuickTime. Selecting **SETUP24.EXE** will install the 24-bit format with the 32-bit version of QuickTime.

If you do not have a 24-bit video card, or are not sure, we suggest running the 8 bit version (**SETUPEXE**). Some 24-bit video cards are not supported by Director. If you install the 24 bit-version and experience difficulties, try installing the 8-bit version. The specific installation instructions follow below.

Note: Both the 16- and 32-bit versions of QuickTime can also be installed independent of the regular setup.exe or setup24.exe. To run Quicktime's installation this CD-ROM separately runs either `x:\install\qtw211\qt16.exe` (for the 16-bit version) or `x:\install\qtw211\qt32.exe` (for the 32-bit version). If you have Windows 95 and are using the 8-bit installation, you need to run the installation for the 32-bit version of QuickTime.

Windows 3.1 and 3.11

1. With the CD-ROM placed in the CD-ROM drive choose the File menu Run option in Program Manager:
2. Type the following in the Run dialog box:
X:\setup.exe (For the standard 8-bit installation, where "X" is the drive letter of your CD-ROM drive. Most local CD-ROM drives are "D" drives.)
or
X:\setup24.exe (For the 24-bit installation, where "X" is the drive letter of your CD-ROM drive. Most local CD-ROM drives are "D" drives.)
Follow the instructions for installing the software.

Windows 95

1. With the CD-ROM placed in the CD-ROM drive choose the Start button menu Run option.
2. Type the following in the Run dialog box:
X:\setup.exe (For the standard 8-bit installation, where "X" is the drive letter of your CD-ROM drive. Most local CD-ROM drives are "D" drives.)
or
X:\setup24.exe (For the 24 bit installation, where "X" is the drive letter of your CD-ROM drive. Most local CD-ROM drives are "D" drives.)
Follow the instructions for installing the software. For unresolved technical problems, contact our technical support group at 800-325-3439 (for overseas calls use 914-747-2707).

All brand and product names are trademarks or registered trademarks of their respective companies.

Bibliography and Suggested Reading

Andreotti, I. "Conceptual and artifactual research programmes in Louis I. Kahn's design of the Phillips Exeter Academy Library (1966-72)," *Design Studies* July 1984.

Brownlee, David B. and David G. De Long, *Louis I. Kahn: In the Realm of Architecture*. New York: Rizzoli International Publications, Inc., 1991.

Jordy, William H. "The Span of Kahn" *Architectural Review* 155, no. 928 (June 1974).

——— "What the Building 'Wants To Be,' Louis I. Kahn's Richards Medical Research Building at the University of Pennsylvania," *American Buildings and Their Architects: The Impact of European Modernism in the Mid-Twentieth Century*. vol. 4. Oxford: Oxford University Press, 1972.

Kahn, Louis I. "Architecture is the Thoughtful Making of Spaces." *Perspecta* no. 4 (1957).

——— "Space, Form, Use: A Library." *Pennsylvania Triangle* 43, no. 2 (December 1956).

——— "An Architect Speaks his Mind." *House and Garden* 142, no. 4 (October 1972).

——— "The Mind of Louis Kahn," *Architectural Forum* 137 (July/August 1972).

——— "On Form and Design." Speech at the 46th meeting of the Association of Collegiate Schools of Architecture, University of California, Berkeley, April 22-23, 1960. Reprinted in *Journal of Architectural Education* XV, no. 3 (Fall 1960).

Latour, Alessandra, ed. *Louis I. Kahn: Writings, Lectures, Interviews*. New York: Rizzoli International Publications, Inc., 1991.

LeCuyer, Annette. "Evaluation: Kahn's Powerful Presence at Exeter," *Architecture: The AIA Journal* no. 74 (February 1985).

Lobell, John. *Between Silence and Light: Spirit in the Architecture of Louis I. Kahn*. Boulder, CO: Shambhala, 1979.

"The Phillips Exeter Academy, Exeter; New Hampshire, Program Requirements for the New Library Recommended by the Library Committee of the Faculty," Rodney Armstrong, Elliot Fish, and Albert Ganley, n.d., University of Pennsylvania and Pennsylvania Historical and Museum Commission, Philadelphia.

Scully, Vincent J. *Louis I Kahn*. New York: George Braziller, 1962.

Wickersham, Jay. "The Making of Exeter Library," *Harvard Architecture Review*, no. 7 (1989).

Wurman, Richard Saul, ed. *What Will Be Has Always Been: The Words of Louis I. Kahn*. New York: Access Press and Rizzoli International Publications, Inc., 1986.

About the Author

Glenn E. Wiggins, Ph.D., is an authority on the work of Louis Kahn and a pioneer in architectural digital publishing. He is an NCARB-certified architect and a Professor of the History of Architecture at the Wentworth Institute of Technology in Boston, Massachusetts.

"The Library at Phillips Exeter Academy in Exeter, NH, has won the Twenty-Five Year award from the American Institute of Architects. The award is bestowed annually on an American work of architecture that has proved its merit over a life of at least a quarter of a century. . . . The Exeter Library, which opened in 1971, was designed by Louis I. Kahn (1901-74). Kahn . . . accomplished something no one else had quite figured out how to do. He made modern buildings that achieved the timeless, monumental presence of the great works of the past. . . . Kahn respected books. 'Nobody ever paid the price of a book; they pay only for the printing,' he once said. Exeter is his attempt to embody, in brick and teak and marble and concrete, the essence of a particular kind of institution: the house of books, the library."

—Robert Campbell,

The Boston Globe, January 11, 1997



This groundbreaking CD-ROM will bring you as close to the Library at Philips Exeter Academy as you can get without actually visiting it. The disc includes:

- video clips of the library's exterior and interior
- animated plans and sections
- hundreds of exterior and interior color photographs
- audio explanations by the author
- archival audio recordings of Kahn's lectures
- illustrated descriptions of five other projects by Kahn

System Requirements:

Macintosh®: 68040 or Power PC processor; Apple® System 7.0 or higher; 5MB of free RAM (8MB recommended); 8-bit video display (16- or 24-bit recommended); 14-inch color monitor; 2X CD-ROM drive.

Windows®: 80486 or Pentium-compatible processor; Windows® 3.1 or higher; 4MB of free RAM (8MB recommended); 640 x 480 color monitor; 2X CD-ROM drive; MPC-compatible sound card; speakers.



Van Nostrand Reinhold

115 Fifth Avenue, New York, NY 10003

www.vnr.com



PUBLISHED BY JOHN WILEY AND SONS, INC.

0471288314



9 780471 2883